

ABSTRACT OF THE DISCLOSURE

A housing accommodating a semiconductor chip is set out. The housing and chip may be used for sending and/or receiving radiation. Popular applications of the housing may be in light emitting diodes. The housing includes a conductor strip that is punched into two electrically isolated portions. The housing further includes a cavity extending inwards from the top of the housing. The conductor portions include respective areas that are exposed at the bottom of the cavity. The semiconductor chip is bonded to one of the exposed areas and a wire bonds the chip to the second exposed area. The conductor portions also terminate in exposed electrodes, which allow for electrical connection of the chip with external devices. A window is formed in the cavity and the walls of the housing that form the cavity may be made of a reflective material. The electrodes remain unexposed to the window but for any residual areas about the chip and bonding wire within the first and second exposed areas. By minimizing the area of the conductor exposed to the window, delamination brought about by the different thermal expansions of the window and conductor are minimized and/or eliminated. Likewise, with a reflective housing covering the base of the cavity that accommodates the window, internal radiation reflection is increased over that which was achieved with an exposed conductor.